

PRKCDBP Antibody
Catalog # ASC11630**Specification**

PRKCDBP Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q969G5
Other Accession	NP_659477 , 47132587
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	29 kDa KDa
Application Notes	PRKCDBP antibody can be used for detection of PRKCDBP by Western blot at 1 - 2 µg/mL.

PRKCDBP Antibody - Additional InformationGene ID **112464****Target/Specificity**

PRKCDBP; It is predicted to not cross-react with other members of the cavin family.

Reconstitution & Storage

PRKCDBP antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

PRKCDBP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PRKCDBP Antibody - Protein Information**Name** CAVIN3 ([HGNC:9400](#))**Synonyms** PRKCDBP, SRBC**Function**

Regulates the traffic and/or budding of caveolae (PubMed:19262564). Plays a role in caveola formation in a tissue- specific manner. Required for the formation of caveolae in smooth muscle but not in the lung and heart endothelial cells. Regulates the equilibrium between cell surface-associated and cell surface- dissociated caveolae by promoting the rapid release of caveolae from the cell surface. Plays a role in the regulation of the circadian clock. Modulates the period length and phase of circadian gene expression and also regulates expression and interaction of the core clock components PER1/2 and CRY1/2 (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q91VJ2}. Membrane, caveola. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q91VJ2}. Note=Localizes in the caveolae in a caveolin-dependent

manner.

Tissue Location

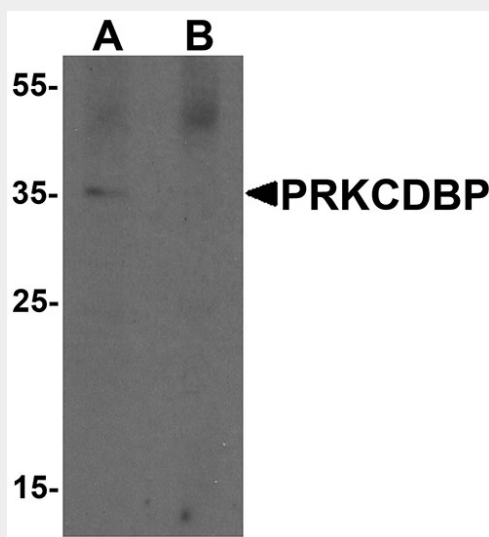
Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Strongly expressed in mammary and epithelial cells.

PRKCDBP Antibody - Protocols

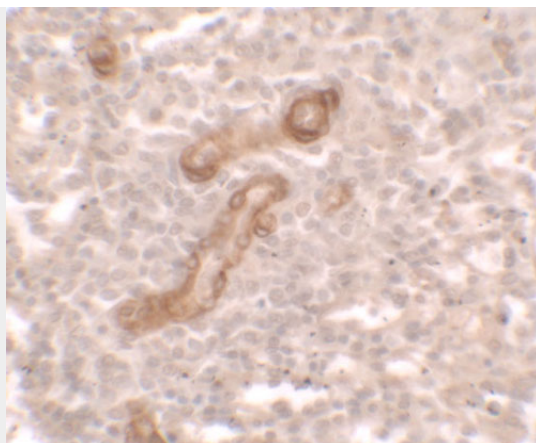
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

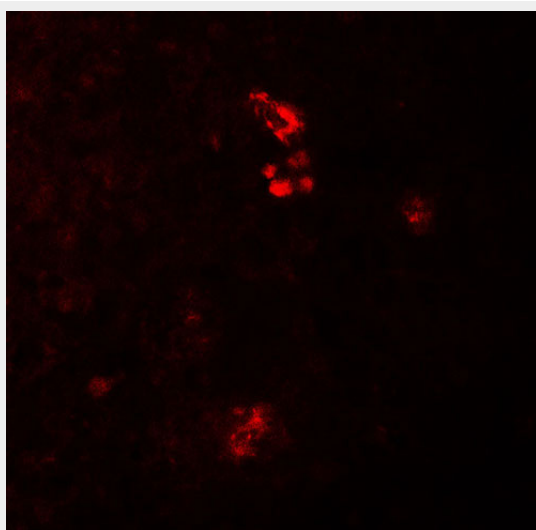
PRKCDBP Antibody - Images



Western blot analysis of PRKCDBP in A20 cell lysate with PRKCDBP antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of PRKCDBP in human spleen tissue with PRKCDBP antibody at 2.5 µg/ml.



Immunofluorescence of PRKCDBP in human spleen tissue with PRKCDBP antibody at 20 µg/ml.

PRKCDBP Antibody - Background

PRKCDBP Antibody: The protein kinase C delta (PKC- δ) binding protein (PRKCDBP), also known as cavin-3, is a member of the cavin family of proteins that are involved in caveolin formation and regulation. PRKCDBP was initially identified in a screen of cultured cell lines for proteins that were strongly induced by serum starvation. Studies indicate that PRKCDBP binds not only to PKC- δ but also to caveolin-1 and helps regulate caveolin traffic and function. Similar to other members of the cavin family, the expression of PRKCDBP was found to be down-regulated in various cancer cell lines, suggesting a possible tumor suppressor function of PRKCDBP.

PRKCDBP Antibody - References

Briand N, Dugail I, and Le Lay S. Cavin proteins: New players in the caveolae field. *Biochimie* 2011; 93:71-7.
Izumi Y, Hirai S, Tamai Y, et al. A protein kinase Cdelta-binding protein SRBC whose expression is induced by serum starvation. *J. Biol. Chem.* 1997; 272:7381-9.
McMahon K, Zajicek H, Li W, et al. SRBC/cavin-3 is a caveolin adapter protein that regulates caveolae function. *EMBO J.* 2009; 28:1001-15.
Bai L, Deng X, Li Q, et al. Down-regulation of the cavin family proteins in breast cancer. *J. Cell Biochem.* 2012; 113:322-8.